Page 55, Equation 20, should read:

$$\widetilde{w}_{1b} = -\widetilde{w}_{0b} = -s_{1z}w_{1a} - c_{1z}w_{1b}. \tag{20}$$

Page 55, equation 21, should read:

$$\alpha\widetilde{w}_{1b}^2 + \beta\widetilde{w}_{1b} + \gamma = 0 \quad \text{with}$$
$$\alpha = F(2,2)$$
$$\beta = s_{0z}F(2,0) - c_{0z}F(2,1) + s_{1z}F(0,2) - c_{1z}F(1,2) \tag{21}$$
$$\tau = s_{1z}[s_{0z}F(0,0) - c_{0z}F(0,1)] - c_{1z}[-s_{0z}F(1,0) + c_{0z}F(1,1)]$$

Attached hereto is an Appendix which includes the above-noted changes in annotated form.

REMARKS

The specification has been amended herein to rectify obvious sign errors in the equations. Those having ordinary skill in the art will appreciate such obvious sign errors in view of the derivations as provided in the application.
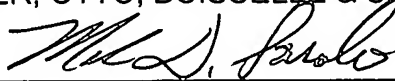
Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Serial No.: 10/081,916

Should a petition for an extension of time be necessary for the timely reply to the outstanding Office Action (or if such a petition has been made and an additional extension is necessary), petition is hereby made and the Commissioner is authorized to charge any fees (including additional claim fees) to Deposit Account No. 18-0988.

Respectfully submitted,

RENNER, OTTO, BOISSELLE & SKLAR, LLP
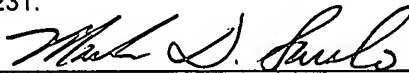
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Mark D. Saralino
Reg. No. 34,243

DATE: _August 16, 2002_

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APPENDIX

AMENDMENTS

IN THE SPECIFICATION:

Page 53, Equation 16, should read:

$$H_{ir} = \begin{bmatrix} c_{iz} & s_{iz} & 0 \\ -s_{iz} & c_{iz} & [0]y_i \\ 0 & 0 & 1 \end{bmatrix} \text{ and } H_{ip} = \begin{bmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ w_{ia} & w_{ib} & 1 \end{bmatrix} \quad (16)$$

Page 54, Equation 17, should read:

$$\begin{bmatrix} 0 & w_{1a} & s_{1z} - w_{1a}y_1 \\ 0 & w_{1b} & -c_{1z} - w_{1b}y_1 \\ 0 & 1 & -y_1 \end{bmatrix} = \begin{bmatrix} \cdot & -s_{0z}F(0,0) + c_{0z}F(0,1)[-]\pm F(0,2)\tilde{w}_{ob}F(0,2) \\ \cdot & -s_{0z}F(1,0) + c_{0z}F(1,1)[-]\pm F(1,2)\tilde{w}_{ob}F(1,2) \\ \cdot & -s_{0z}F(2,0) + c_{0z}F(2,1)[-]\pm F(2,2)\tilde{w}_{ob}F(2,2) \end{bmatrix} \quad (17)$$

Page 54, lines 3-5, should read:

where $\tilde{w}_{ob} = [-]s_{0z}w_{0a} + c_{0z}w_{0b}$. Solving the above equations and noting that equality is up to scale, yields the following solution.

Page 54, Equation 19, should read:

$$y_1 = -F(2,2)/w_{1c}$$
$$w_{1a} = [c_{0z}F(0,1) - s_{0z}F(0,0)[-]\pm F(0,2)\tilde{w}_{ob}]/w_{1c}$$
$$w_{1b} = [c_{0z}F(1,1) - s_{0z}F(1,0)[-]\pm F(1,2)\tilde{w}_{ob}]/w_{1c}$$
$$w_{1c} = c_{0z}F(2,1) - s_{0z}F(2,0)[-]\pm F(2,2)\tilde{w}_{ob} \quad (19)$$
$$[c_{1z}]\underline{s_{1z}} = F(0,2)/w_{1c} + w_{1a}y_1$$
$$[s_{1z}]\underline{c_{1z}} = -(F(1,2)/w_{1c} + w_{1b}y_1)$$

Page 55, paragraph 1, should read:

To minimise the amount of image distortion, one can choose $\widetilde{w}_{0b}$ such that $\widetilde{w}_{0b}$ = $-\widetilde{w}_{1b}$. R. Hartley (1998) (supra) and Loop et al (supra) used image distortion criteria that are different from the one disclosed here. Noting that $\widetilde{w}_{ib}$ denotes the y-component projective term in the co-ordinate frame rotated by H_{ir} (i.e. $\widetilde{w}_{ib} = -s_{iz}w_{ia}[+]\underline{-}c_{iz}w_{ib}$), it is necessary to solve:

Page 55, equation 20, should read:

$$\widetilde{w}_{1b} = -\widetilde{w}_{0b} = -s_{1z}w_{1a}[+]\underline{-}c_{1z}w_{1b.} \qquad (20)$$

Page 55, equation 21, should read:

$$\alpha\widetilde{w}_{1b}^2 + \beta\widetilde{w}_{1b} + \gamma = 0 \quad \text{with}$$

$$\alpha = F(2,2)$$

$$\beta = [-]s_{0z}F(2,0)[+]\underline{-}c_{0z}F(2,1) + s_{1z}F(0,2) - c_{1z}F(1,2) \qquad (21)$$

$$\tau = s_{1z}\big[[-]s_{0z}F(0,0)[+]\underline{-}c_{0z}F(0,1)\big] - c_{1z}\big[-s_{0z}F(1,0) + c_{0z}F(1,1)\big]$$